

Part 2: Group Work**GROUP #:** A**GROUP MEMBERS PRESENT:** P

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

5

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

7, 6

- C. You climb a tree and knock an apple off of a branch.

1, 4

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

5

Part 2: Group Work**GROUP #:** B**GROUP MEMBERS PRESENT:** [REDACTED]

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

Temperature

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

Buoyancy Density

- C. You climb a tree and knock an apple off of a branch.

Gravitational

Energy

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

Energy

Temperature

Part 2: Group Work**GROUP #:** C**GROUP MEMBERS PRESENT:** [REDACTED]

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

Principles 2, 3, 5

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

5, 7

- C. You climb a tree and knock an apple off of a branch.

1, 4

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

8

GROUP #: D

GROUP MEMBERS PRESENT:

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

5 & 3

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

5 & 6

- C. You climb a tree and knock an apple off of a branch.

1 & 7

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

5 & 8 & 4

Part 2: Group Work**GROUP #:** E**GROUP MEMBERS PRESENT:** [REDACTED]

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold. *Temperature*

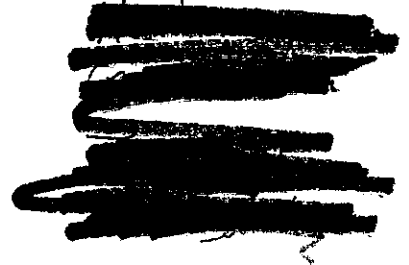
B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air. *Temperature, (thermal) energy, Density, buoyancy*

C. You climb a tree and knock an apple off of a branch.

Gravity, energy

D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

*Feedback loops → (negative feedback)
Temperature*



GROUP #:
GROUP MEMBERS PRESENT:

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

5

6

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

5

6

7

- C. You climb a tree and knock an apple off of a branch.

3

2

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

2

6

5

Part 2: Group Work

GROUP #: G

GROUP MEMBERS PRESENT:

A 41398990

A 42235241

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

Principle #3
Principle #5

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

Principle #2
Principle #3
Principle #5

- C. You climb a tree and knock an apple off of a branch.

Principle #1
Principle #4

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

Principle #5

Part 2: Group Work**GROUP #:** H**GROUP MEMBERS PRESENT:**  Y)

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold. 3 45

B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air. 1, 6, 5, 3 & 7

C. You climb a tree and knock an apple off of a branch.

1 & 4

D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

5 & 1

Part 2: Group Work**GROUP #:** I**GROUP MEMBERS PRESENT:** 

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

principle 2 - equilibrium

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

principle 5 - Temperature

principle 6 - Density

- C. You climb a tree and knock an apple off of a branch.

principle 1 - Gravity

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

principle 4 - Energy

Part 2: Group Work**GROUP #:** J**GROUP MEMBERS PRESENT:**

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold. causal 1- thermal energy

B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

causal 1 and causal 6.

C. You climb a tree and knock an apple off of a branch.

causal 1 and causal 2.

D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

causal 5.

GROUP #: V-

GROUP MEMBERS PRESENT:

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

1, 4, 5

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

1, 5, 6, 7

- C. You climb a tree and knock an apple off of a branch.

1, 4, 6,

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

1, 4, 5,

Part 2: Group Work**GROUP #****GROUP MEMBERS PRESENT:** Kin

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

principle # 5.

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

principle # 1, # 5, # 7

- C. You climb a tree and knock an apple off of a branch.

Principle # 1

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

principle # 2, # 5

ISP203A – Global Change
Part 2: Group Work

Introduction Activity

[REDACTED] M

GROUP #:

GROUP MEMBERS PRESENT:

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

You have the room temperature and a hot cup of tea, the systems reach equilibrium when the heat from the cups has been dispersed through the room, making the cup seem cold. Number 3

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

S, b, 7

- C. You climb a tree and knock an apple off of a branch.

1

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

S, 4

Part 2: Group Work**GROUP #:** 0**GROUP MEMBERS PRESENT:**


Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold. 3, 4

B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.
5, 6

C. You climb a tree and knock an apple off of a branch.
1

D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.
4

Part 2: Group Work**GROUP #:** P**GROUP MEMBERS PRESENT:** [REDACTED]

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

Energy, Temperature

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

Buoyancy, Temperature, Density, Energy

- C. You climb a tree and knock an apple off of a branch.

Energy,

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

Temperature, Density, Energy

Part 2: Group Work**GROUP #:** Q**GROUP MEMBERS PRESENT:** E

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

2, 4, 5

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

5, 7

- C. You climb a tree and knock an apple off of a branch.

1, 8

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

5,

Part 2: Group Work**GROUP #:** R**GROUP MEMBERS PRESENT:** 

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

5 & 2

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

7 & 5

- C. You climb a tree and knock an apple off of a branch.

1 & 4

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

2

Part 2: Group Work**GROUP #:** 5**GROUP MEMBERS PRESENT:** [REDACTED]

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

5

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

5,6

- C. You climb a tree and knock an apple off of a branch.

1

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

5

GROUP #: T

GROUP MEMBERS PRESENT:

Work in your groups and try to identify which causal principles relate to each of the following scenarios. There can be more than one causal principle assigned to each.

- A. You make cup of tea, and the phone rings. When you return to your cup of tea it has gotten cold.

Temperature.

- B. Your friend's birthday is coming up and you buy her some balloons. The balloons are filled with helium so they float. It's February in East Lansing and therefore it's cold outside. As you bring the balloons to your car, they appear to deflate and are hanging a little lower in the air.

Buoyancy.

- C. You climb a tree and knock an apple off of a branch.

Gravity.

- D. In the morning, before the sun rises, the temperature is the coldest it is all night long. Sometimes dew forms on the grass. When the dew forms the temperature rises just a bit even though the sun has not risen to warm the atmosphere.

Temperature. feedback loop.